

Equal 9 step grey scaling between $L^*_{0aN}=8.1$ and $L^*_{0aW}=95.9$, $Y_{0ref}=0.4$, normalisation white W

$L^*_{0aN}=8.1$, $L^*_{0aU}=52.1$, $L^*_{0aW}=96.0$, $Y_{0aN}=0.9$, $Y_{0aU}=20.2$, $Y_{0aW}=90.0$, $C_{0aY}=Y_{0aW}:Y_{0aN}=99.9$

$L^*_{taN}=11.2$, $L^*_{taU}=52.4$, $L^*_{taW}=96.0$, $Y_{taN}=1.3$, $Y_{taU}=20.5$, $Y_{taW}=90.0$, $C_{taY}=Y_{taW}:Y_{taN}=69.5$

Regularity index according to ISO/IEC 15775:2022, annex G for 5 and 9 steps

$g^* = 100 [\Delta L^*_{min}] / [\Delta L^*_{max}]$, $L^*_{CIE LAB} = 116 [Y/Y_n]^{1/3} - 16$ with $Y \geq 0.882$, $Y_n=100$

$g^*_5=99$, $g^*_9=99$

$g^*_5=90$, $g^*_9=86$

$g^*_5=97$, $g^*_9=96$

$L^*_{CIE LAB}$	n0. i	intended output				real output					linearized output	
		L^*_{0a}	L^*_{0r}	Y_{0a}	Y_{0r}	L^*_{ta}	ΔL^*_{ta}	L^*_{tr}	Y_{ta}	$(L^*_{tr})^{1/1.04}$	L^*_{la}	ΔL^*_{la}
100	○ 9	96.0	1.0	90.0	1.0	96.0		1.0	90.0	1.0	96.0	
							10.9					10.5
	● 8	85.0	0.875	66.0	0.731	85.1		0.871	66.1	0.876	85.5	
							10.9					10.5
75	● 7	74.0	0.75	46.7	0.515	74.1		0.742	46.9	0.752	74.9	
							10.9					10.6
	● 6	63.0	0.625	31.6	0.345	63.3		0.614	31.9	0.627	64.3	
							10.8					10.7
50	● 5	52.1	0.5	20.2	0.217	52.4		0.486	20.5	0.501	53.7	
							10.8					10.7
	● 4	41.1	0.375	11.9	0.124	41.6		0.358	12.3	0.374	43.0	
							10.6					10.7
25	● 3	30.1	0.25	6.3	0.06	31.0		0.233	6.6	0.248	32.2	
							10.3					10.6
	● 2	19.1	0.125	2.8	0.021	20.7		0.111	3.2	0.122	21.6	
							9.4					10.3
0	● 1	8.1	0.0	0.9	0.0	11.2		0.0	1.3	0.0	11.2	

$\Delta L^*_{0a}=11.0$ (i=1,2,...,8)

normalisation: $Y_{taiW}=Y_{0aW} \frac{Y_{0ai}+Y_{0ref}}{Y_{0aW}+Y_{0ref}}$